

REMARKS

Claims 1-19 are pending in the present application and claims 20-23 have been added, leaving claims 1-23 pending for consideration upon entry of the present amendment.

Reconsideration of the rejection of claims 1-19 is respectfully requested.

Summary of Examiner Interview

Applicant and Applicant's representative thank the Examiner for the courtesy extended them in the interview of May 29, 2003. At that interview, B. Chisum described the delamination problems encountered with certain flexographic printing tapes and showed the Examiner a tape made without an anchoring layer, and a tape made with an anchoring layer as described in the present application. The Applicant further showed the Examiner the photomicrographs and ESCA data described and attached in the accompanying Declaration. Possible mechanisms for the observed improvements were discussed, the Applicants particularly pointing to the Comparative Example of Table 1, which use "SA 2" PET film from Teijin, and, in response to the Examiner's query, stating that washing the samples did not produce the observed improvements. The Applicant agreee with the Examiner that an "improvement in cohesive strength" was likely not the mechanism for the observed improvements. The Examiner agreed to reconsider the rejections of the claims, and indicated that the data should be submitted in Declaration form.

Applicant's representative further noted that during the course of preparing for the interview, an inadvertent error in the description of the data of Table 2 was discovered, and that an amendment to the specification would be made in order to correct the error.

Claim Rejections

Claims 1-19 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Applicants' admission either individually, or in view of U.S. Patent No. 3,839,078 to Birchall et al. ("Birchall"). In particular, the Examiner states reiterates that "Birchall teaches that it has been a common practice to coat a surface of a film substrate with one or more adhesion promoting layers which adhere to the film substrate and to which the superstrate readily adheres often referred to as 'anchor' coatings", such that "it would have been obvious to one of ordinary skill in the art to modify Applicants' admitted prior art with an anchor layer"

Applicants respectfully request reconsideration of this rejection. Applicants had in fact recognized that delamination of a polyurethane compressible layer and a reinforcing layer such as PET in certain flexographic tapes was not necessarily due to insufficient bond strength between the two layers, but rather "due to weak cohesive strength at the surface of the PET film" (Specification, page 2, lines 10-12). The evidence for cohesive failure of the PET film is described more fully in the attached Declaration, and includes the appearance of the delaminated surfaces under SEM, results from ESCA analysis of the delaminated surfaces, and the fact that attempts to clean the surfaces of the reinforcing films prior to coating were ineffective to prevent delamination.

Use of an anchoring layer as presently described and claimed is thus unobvious, because as noted by the Examiner, anchoring layers are typically used as "adhesion promoting" layers. Here, the inventors had developed evidence indicating that delamination

occurred as a result of cohesive failure of the reinforcing film, not failure of the bond between the film and the polyurethane foam. The inventors accordingly had no motivation to test the effect of using an anchoring layer. The inventors certainly had no expectation of success, as there would be no reason to expect that use of an anchoring layer would improve the apparent cohesive strength of the reinforcing film. *See, In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988).

For these same reasons, use of an anchoring layer as disclosed and claimed provides unexpected results. Where delamination is due to the characteristics of one of the layers rather than the bond between the layers, it is unexpected that the presence of a layer used to improve bond would prevent delamination.

Furthermore, as shown in Table 1, flexographic tapes that are missing the claimed anchoring layer (Comparative Example) can be delaminated readily using the described crosshatch and peel test. Of particular interest is the Comparative Example using an “SA 2” PET film from Teijin. According to the manufacturer this film possesses high z-axis strength relative to other commercially available films. A higher z-axis strength film would be expected to have a higher cohesive strength than other films in the crosshatch and peel test, but this film also fails the crosshatch and peel test. The fact that use of an anchoring layer can overcome delamination (Inventive Examples) when higher z-axis strength cannot is further evidence of the unexpected nature of the results obtained by the present invention. Applicants therefore respectfully request reversal of the rejection an allowance of claims 1-24.

Amendments to Specification

During the course of preparing for the above interview, it was realized that due to an inadvertent error on the part of the preparing attorney, and without deceptive intent, the Examples in Table 2 were mis-identified. As can be seen from the Table, none of the flexographic tapes made from the films set forth in the Table comprise an anchoring layer. Thus, none of the flexographic tapes made from these films are within the scope of invention, and all of the samples should have been marked as "Comparative". Applicants have therefore deleted the Table and its description in its entirety.

It is believed that no new matter is introduced by this amendment, since the application as a whole, the claims, and the remaining examples teach that only flexographic tapes with an anchoring layer are within the scope of the invention. "[M]atter added that makes explicit that which was implicit, inherent, or intrinsic in the original disclosure is not new matter and is permitted". 35 U.S.C. § 132. Furthermore, "conformation of one part of the disclosure to another portion thereof is clearly permissible." 37 C.F.R. § 1.117. Since Applicants have summarized the invention, discussed the invention, disclosed Examples of the invention, and claimed the invention to include an anchoring layer, and the films of Example 2 have no anchoring layer, Applicants are permitted to later amend the Application make the entire application consistent, without introducing new matter. *In re Smythe and Shamos*, 178 U.S.P.Q. 279, 285-286 (C.C.P.A. 1973).

New Claims

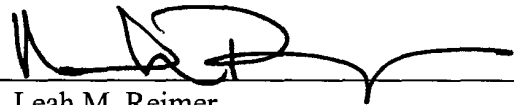
New claims 20-23 have been added to further clarify the invention, and are allowable as depending from allowable independent claims. Antecedent basis for the amendments is found, for example, at Table 1.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicants' Attorneys.

Respectfully submitted,

CANTOR COLBURN LLP
Applicants' Attorneys

By: _____



Leah M. Reimer
Registration No. 39,341

Date: July 7, 2003
Customer No.: 23413
Telephone: (860) 286-2929

Versions with markings to show changes made.

Example 2.

To test adhesion to different types of films, the above procedures were followed using the films set forth in Table 2 below.

Table 2.

Trade Name	Manufacturer	Description	Result
PVC Vinyl*	Presco	Flexible vinyl	Passed
PVC Vinyl*	Flexcon	Rigid vinyl	Passed
KALADEX*	DuPont	Polyethylene naphthalate	Failed
LEXAN FR 83*	General Electric	Polycarbonate	Passed
VALOX FR1*	General Electric	Polybutylene terephthalate	Passed
ULTEM 1000*	General Electric	Polyetherimide	Passed

*Comparative Example